PATENT
Customer No. 22,852
Application No. 09/393,302
Attorney Docket No. 3495.0166-01

infected cell and a gp120 envelope glycoprotein of said HIV, wherein the inhibitor is not nuclear nucleolin.

- 4. (Amended) An inhibitor molecule that is homologous to the inhibitor molecule of claim 3, wherein said inhibitor molecule comprises a peptide or pseudopeptide containing at least one amino acid addition, deletion, or substitution in the amino acid sequence.
- 5. (Amended) The inhibitor molecule according to any one of claims 2 to 4 in which a -CONH- peptide bond is replaced by a (-CH₂NH-) reduced bond, a (-NHCO-) retro inverso bond, a (-CH₂-O-) methylene-oxy bond, a (-CH₂-S-) thiomethylene bond, a (-CH₂CH₂-) carba bond, a (-CO-CH₂-) cetomethylene bond, a (-CHOH-CH₂-) hydroxyethylene bond, a (-N-N-) bond, a E-alcene bond, or a (-CH=CH-) bond.
- 6. (Amended) The inhibitor molecule according to any one of claims 2 to 5, which comprises amino acid sequences selected from the following P95/nucleolin sequences:
- the sequence beginning at the amino acid in position 22 and ending at the amino acid in position 44 of SEQ ID NO: 1;
- the sequence beginning at the amino acid in position 143 and ending at the amino acid in position 171 of SEQ ID NO: 1;
- the sequence beginning at the amino acid in position 185 and ending at the amino acid in position 209 of SEQ ID NO: 1; or
- the sequence beginning at the amino acid in position 234 and ending at the amino acid in position 271 of SEQ ID NO: 1.

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- Q3 (6)
- 9. (Amended) An inhibitor molecule, which comprises a polymer of an inhibitor molecule according to any one of claims 3 to 6, that contains 2 to 20 monomer units from the amino acid sequence of P95/nucleolin, P40/PHAPIII, or P30/PHAPI.
- 10. (Amended) The inhibitor molecule according to any one of claims 2 to 6 or 9, which is a MAP matrix structure.
- 13. (Amended) A therapeutic composition comprising a pharmaceutically effective amount of an inhibitor molecule according to any one of claims 2 to 6 or 9 to 10, optionally in combination with another anti-HIV molecule.
- 23. (Amended) A method for screening an inhibitor according to any one of claims 2 to 6, 9 to 10, 13, or 22, comprising:
- a) bringing into contact at least one cell expressing an HIV receptor at its surface with an amount of a HIV retrovirus equal to the ICID₅₀;
- b) incubating said at least one cell and retroviruses at 37°C during a period of time sufficient to allow the entry of the retrovirus within the at least one cell, in the presence of a defined amount of the compound to be assayed;
- c) washing the at least one cell in order to remove the retroviruses that have been absorbed onto the membranes of the at least one cell;
- d) treating the at least one cell in order to eliminate the remaining extracellular retroviruses by a controlled proteolysis with trypsin;
- e) preparing cytoplasmic extracts by treating the at least one cell of step d) with an extraction buffer containing 20 mM Tris-HCl (pH7.6), 0.15 M NaCl, 5 mM MgCl₂, 0.2 mM PMSF, 100 U/ml aprotinin and 0.5% Triton X-100;

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